

STUDIES IN INTELLIGENCE



Journal of the America Intelligence Professional

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*Reflections of an intelligence scholar
and Senate Select Committee investigator*

ANALYSIS, WAR AND DECISION: WHY INTELLIGENCE FAILURES ARE INEVITABLE

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The Editors commend this article to all producers and consumers of estimative and warning intelligence. It is reprinted from World Politics, Vol. XXXI No. 1 (October 1978), Copyright ©1978 by Princeton University Press, by permission of the copyright holder.

Military disasters befall some states, no matter how informed their leaders are, because their capabilities are deficient. Weakness, not choice, is their primary problem. Powerful nations are not immune to calamity either, because their leaders may misperceive threats or miscalculate responses. Information, understanding, and judgment are a larger part of the strategic challenge for countries such as the United States. Optimal decisions in defense policy therefore depend on the use of strategic intelligence: the acquisition, analysis, and *appreciation* of relevant data. In the best-known cases of intelligence failure, the most crucial mistakes have seldom been made by collectors of raw information, occasionally by professionals who produce finished analyses, but most often by the decision makers who consume the products of intelligence services. Policy premises constrict perception, and administrative workloads constrain reflection. Intelligence failure is political and psychological more often than organizational.

Observers who see notorious intelligence failures as egregious often infer that disasters can be avoided by perfecting norms and procedures for analysis and argumentation. This belief is illusory. Intelligence can be improved marginally, but not radically, by altering the analytic system. The illusion is also dangerous if it abets overconfidence that systemic reforms will increase the predictability of threats. The use of intelligence depends less on the bureaucracy than on the intellects and inclinations of the authorities above it. To clarify the tangled relationship of analysis and policy, this essay explores conceptual approaches to intelligence failure, differentiation of intelligence problems, insurmountable obstacles to accurate assessment, and limitations of solutions proposed by critics.

I. APPROACHES TO THEORY

Case studies of intelligence failures abound, yet scholars lament the lack of a theory of intelligence.¹ It is more accurate to say that we lack a positive or normative

*For corrections or comments whose usefulness exceeded my ability to accommodate them within space limitations, thanks are due to Bruce Blair, Thomas Blau, Michael Handel, Robert Jervis, Klaus Knorr, H. R. Trevor-Roper, and members of the staff of the National Foreign Assessment Center.

¹For example, Klaus Knorr, "Failures in National Intelligence Estimates: The Case of the Cuban Missiles," *World Politics*, xvi (April 1964), 455, 465-66; Harry Howe Ransom, "Strategic Intelligence and Foreign Policy," *World Politics*, xxvii (October 1974), 145.

theory of intelligence. Negative or descriptive theory—the empirical understanding of how intelligence systems make mistakes—is well developed. The distinction is significant because there is little evidence that either scholars or practitioners have succeeded in translating such knowledge into reforms that measurably reduce failure. Development of a normative theory of intelligence has been inhibited because the lessons of hindsight do not guarantee improvement in foresight, and hypothetical solutions to failure only occasionally produce improvement in practice. The problem of intelligence failure can be conceptualized in three overlapping ways. The first is the most reassuring; the second is the most common; and the third is the most important.

1. *Failure in perspective.* There is an axiom that a pessimist sees a glass of water as half empty and an optimist sees it as half full. In this sense, the estimative system is a glass half full. Mistakes can happen in any activity. Particular failures are accorded disproportionate significance if they are considered in isolation rather than in terms of the general ratio of failures to successes; the record of success is less striking because observers tend not to notice disasters that do not happen. Any academician who used a model that predicted outcomes correctly in four out of five cases would be happy; intelligence analysts must use models of their own and should not be blamed for missing occasionally. One problem with this benign view is that there are no clear indicators of what the ratio of failure to success in intelligence is, or whether many successes on minor issues should be reassuring in the face of a smaller number of failures on more critical problems.² In the thermonuclear age, just *one* mistake could have apocalyptic consequences.

2. *Pathologies of communication.* The most frequently noted sources of breakdowns in intelligence lie in the process of amassing timely data, communicating them to decision makers, and impressing the latter with the validity or relevance of the information. This view of the problem leaves room for optimism because it implies that procedural curatives can eliminate the dynamics of error. For this reason, official post mortems of intelligence blunders inevitably produce recommendations for reorganization and changes in operating norms.

3. *Paradoxes of perception.* Most pessimistic is the view that the roots of failure lie in unresolvable trade-offs and dilemmas. Curing some pathologies with organizational reforms often creates new pathologies or resurrects old ones;³ perfecting intelligence production does not necessarily lead to perfecting intelligence consumption; making warning systems more sensitive reduces the risk of surprise, but increases the number of false alarms, which in turn reduces sensitivity; the principles of optimal analytic procedure are in many respects incompatible with the imperatives of the decision process; avoiding intelligence failure requires the elimination of strategic preconceptions, but leaders cannot operate purposefully without some preconceptions. In devising measures to improve the intelligence process, policy makers are damned if they do and damned if they don't.

² "As that ancient retiree from the Research Department of the British Foreign Office reputedly said, after serving from 1903-50: 'Year after year the worriers and fretters would come to me with awful predictions of the outbreak of war. I denied it each time. I was only wrong twice.'" Thomas L. Hughes, *The Fate of Facts in a World of Men—Foreign Policy and Intelligence-Making* (New York: Foreign Policy Association, Headline Series No. 233, December 1976), 48. Paradoxically, "successes may be indistinguishable from failures." If analysts predict war and the attacker cancels his plans because surprise has been lost, "success of the intelligence services would have been expressed in the falsification of its predictions," which would discredit the analysis. Avi Shlaim, "Failures in National Intelligence Estimates: The Case of the Yom Kippur War," *World Politics*, xxviii (April 1976), 378.

³ Compare the prescriptions in Peter Szanton and Graham Allison, "Intelligence: Seizing the Opportunity," with George Carver's critique, both in *Foreign Policy*, No. 22 (Spring 1976).

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It is useful to disaggregate the problem of strategic intelligence failures in order to elicit clues about which paradoxes and pathologies are pervasive and therefore most in need of attention. The crucial problems of linkage between analysis and strategic decision can be subsumed under the following categories:

1. *Attack warning.* The problem in this area is timely prediction of an enemy's immediate intentions, and the "selling" of such predictions to responsible authorities. Major insights into intelligence failure have emerged from catastrophic surprises: Pearl Harbor, the Nazi invasion of the U.S.S.R., the North Korean attack and Chinese intervention of 1950, and the 1973 war in the Middle East. Two salient phenomena characterize these cases. First, evidence of impending attack was available, but did not flow efficiently up the chain of command. Second, the fragmentary indicators of alarm that did reach decision makers were dismissed because they contradicted strategic estimates or assumptions. In several cases hesitancy in communication and disbelief on the part of leaders were reinforced by deceptive enemy maneuvers that cast doubt on the data.⁴

2. *Operational evaluation.* In wartime, the essential problem lies in judging the results (and their significance) of interacting capabilities. Once hostilities are under way, informed decision making requires assessments of tactical effectiveness—"how we are doing"—in order to adapt strategy and options. In this dimension, the most interesting insights have come from Vietnam-era memoirs of low-level officials and from journalistic muckraking. Again there are two fundamental points. First, within the context of a glut of ambiguous data, intelligence officials linked to operational agencies (primarily military) tend to indulge a propensity for justifying service performance by issuing optimistic assessments, while analysts in autonomous non-operational units (primarily in the Central Intelligence Agency and the late Office of National Estimates) tend to produce more pessimistic evaluations. Second, in contrast to cases of attack warning, fragmentary tactical indicators of *success* tend to override more general and cautious strategic estimates. Confronted by differing analyses, a leader mortgaged to his policy tends to resent or dismiss the critical ones, even when they represent the majority view of the intelligence community, and to cling to the data that support continued commitment.⁵ Lyndon Johnson railed at his Director of

⁴ Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford: Stanford University Press 1962); Barton Whaley, *Codeword Barbarossa* (Cambridge: The M.I.T. Press 1973); Harvey De Weerd, "Strategic Surprise in the Korean War," *Orbis*, vi (Fall 1962); Alan Whiting, *China Crosses the Yalu* (New York: Macmillan 1960); James F. Schnabel, *Policy and Direction: The First Year* (Washington, D.C.: Department of the Army 1972), 61-65, 83-85, 274-78; Michael I. Handel, *Perception, Deception, and Surprise: The Case of the Yom Kippur War* (Jerusalem: Leonard Davis Institute of International Relations, Jerusalem Paper No. 19, 1976); Shlaim (fn. 2); Abraham Ben-Zvi, "Hindsight and Foresight: A Conceptual Framework for the Analysis of Surprise Attacks," *World Politics*, xxviii (April 1976); Amos Perlmutter, "Israel's Fourth War, October 1973: Political and Military Misperceptions," *Orbis*, xix (Summer 1975); U.S. Congress, House, Select Committee on Intelligence [hereafter cited as HSCI], *Hearings, U.S. Intelligence Agencies and Activities: The Performance of the Intelligence Community*, 94th Cong., 1st sess., 1975; Draft Report of the House Select Committee on Intelligence, published in *The Village Voice*, February 16, 1976, pp. 76-81.

⁵ David Halberstam, *The Best and the Brightest* (New York: Random House 1972); Morris Blackman, "The Stupidity of Intelligence," in Charles Peters and Timothy J. Adams, eds., *Inside the System* (New York: Praeger 1970); Patrick J. McGarvey, "DIA: Intelligence to Please," in Morton Halperin and Arnold Kanter, eds., *Readings in American Foreign Policy: A Bureaucratic Perspective* (Boston: Little, Brown 1973); Chester Cooper, "The CIA and Decision-Making," *Foreign Affairs*, Vol. 50 (January 1972); Sam Adams, "Vietnam Cover-Up: Playing War With Numbers," *Harper's*, Vol. 251 (June 1975); Don Oberdorfer, *Tet!* (Garden City, N.Y.: Doubleday 1971). For a more detailed review, see Richard K. Betts, *Soldiers, Statesmen, and Cold War Crises* (Cambridge: Harvard University Press 1977), chap. 10.

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Central Intelligence (DCI) at a White House dinner: "Policy making is like milking a fat cow. You see the milk coming out, you press more and the milk bubbles and flows, and just as the bucket is full, the cow with its tail whips the bucket and all is spilled. That's what CIA does to policy making."⁶ From the consensus-seeking politician, this was criticism; to a pure analysts, it would have been flattery. But it is the perspective of the former, not the latter, that is central in decision making.

3. *Defense planning.* The basic task in using intelligence to develop doctrines and forces for deterrence and defense is to estimate threats posed by adversaries, in terms of both capabilities and intentions, over a period of several years. Here the separability of intelligence and policy, analysis and advocacy, is least clear. In dealing with the issue of "how much is enough" for security, debates over data merge murkily into debates over options and programs. As in operational evaluation, the problem lies more in data mongering than in data collecting. To the extent that stark generalizations are possible, the basic points in this category are the reverse of those in the previous one.

First, the justification of a mission (in this case, preparedness for future contingencies as opposed to demonstration of current success on the battlefield) prompts pessimistic estimates by operational military analysts; autonomous analysts without budgetary axes to grind, but with biases similar to those prevalent in the intellectual community, tend toward less alarmed predictions.⁷ Military intelligence inclines toward "worst-case" analysis in planning, and toward "best-case" analysis in operational evaluation. (Military intelligence officials such as Lieutenant General Daniel Graham were castigated by liberals for *underestimating* the Vietcong's strength in the 1960's but for *overestimating* Soviet strength in the 1970's.) Air Force intelligence overestimated Soviet air deployments in the "bomber gap" controversy of the 1950's, and CIA-dominated National Intelligence Estimates (NIE's) under-estimated Soviet ICBM deployments throughout the 1960's (over-reacting, critics say, to the mistaken prediction of a "missile gap" in 1960).⁸

Second, in the context of peacetime, with competing domestic claims on resources, political leaders have a natural interest in at least partially rejecting military estimates and embracing those of other analysts who justify limiting allocations to defense programs. If the President had accepted pessimistic CIA operational evaluations in the mid-1960's, he might have withdrawn from Vietnam; if he had accepted pessimistic military analyses of the Soviet threat in the mid-1970's, he might have added massive increases to the defense budget.

⁶ Quoted in Henry Brandon, *The Retreat of American Power* (Garden City, N.Y.: Doubleday 1973), 103.

⁷ Betts (fn. 5), 160-61, 192-95. On bias within CIA, see James Schlesinger's comments in U.S., Congress, Senate, Select Committee to Study Governmental Operations with Respect to Intelligence Activities [hereafter cited as SSCI], *Final Report, Foreign and Military Intelligence*, Book I, 94th Cong., 2d sess., 1976, 76-77.

⁸ *Ibid.*, Book IV, 56-59; William T. Lee, *Understanding the Soviet Military Threat: How CIA Estimates Went Astray* (New York: National Strategy Information Center, Agenda Paper No. 6, 1977), 24-37; Albert Wohlstetter: "Is There a Strategic Arms Race?" *Foreign Policy*, No. 15 (Summer 1974); Wohlstetter, "Rivals, But No Race," *Foreign Policy*, No. 16 (Fall 1974); Wohlstetter, "Optimal Ways to Confuse Ourselves," *Foreign Policy*, No. 20 (Fall 1975). There are exceptions to this pattern of military and civilian bias: see *ibid.*, 185-88; Lieutenant General Daniel Graham, USA (Ret.), "The Intelligence Mythology of Washington," *Strategic Review*, iv (Summer 1976), 61-62, 64; Victor Marchetti and John Marks, *The CIA and the Cult of Intelligence* (New York: Knopf 1974), 309.

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Some chronic sources of error are unique to each of these three general categories of intelligence problems, and thus do not clearly suggest reforms that would be advisable across the board. To compensate for the danger in conventional attack warning, reliance on worst-case analysis might seem the safest rule, but in making estimates for defense planning, worst-case analysis would mandate severe and often unnecessary economic sacrifices. Removing checks on the influence of CIA analysts and "community" staffs⁹ might seem justified by the record of operational evaluation in Vietnam, but would not be warranted by the record of estimates on Soviet ICBM deployments. It would be risky to alter the balance of power systematically among competing analytic components, giving the "better" analysts more status. Rather, decision makers should be encouraged to be more *and* less skeptical of certain agencies' estimates, *depending on the category of analysis involved*.

Some problems, however, cut across all three categories and offer a more general basis for considering changes in the system. But these general problems are not very susceptible to cure by formal changes in process, because it is usually impossible to disentangle intelligence failures from policy failures. Separation of intelligence and policy making has long been a normative concern of officials and theorists, who have seen both costs and benefits in minimizing the intimacy between intelligence professionals and operational authorities. But, although the personnel can be segregated, the functions cannot, unless intelligence is defined narrowly as the collection of data, and analytic responsibility is reserved to decision makers. Analysis and decision are interactive rather than sequential processes. By the narrower definition of intelligence, there have actually been few major failures. In most cases of mistakes in predicting attacks or in assessing operations, the inadequacy of critical data or their submergence in a viscous bureaucracy were at best the proximate causes of failure. The ultimate causes of error in most cases have been wishful thinking, cavalier disregard of professional analysts, and, above all, the premises and preconceptions of policy makers. Fewer fiascoes have occurred in the stages of acquisition and presentation of facts than in the stages of interpretation and response. Producers of intelligence have been culprits less often than consumers. Policy perspectives tend to constrain objectivity, and authorities often fail to use intelligence properly. As former State Department intelligence director Ray Cline testified, defending his analysts' performance in October 1973 and criticizing Secretary Kissinger for ignoring them:

Unless something is totally conclusive, you must make an inconclusive report. . . . by the time you are sure it is always very close to the event. So I don't think the analysts did such a lousy job. What I think was the lousy job was in bosses not insisting on a new preparation at the end of that week [before war broke out]. . . . the reason the system wasn't working very well is that people were not asking it to work and not listening when it did work.¹⁰

II. BASIC BARRIERS TO ANALYTIC ACCURACY

Many constraints on the optimal processing of information lie in the structure of authority and the allocation of time and resources. Harold Wilensky argues persuasively that the intelligence function is hindered most by the structural

⁹ The U.S. intelligence *community* includes the CIA, Defense Intelligence Agency (DIA), National Security Agency, the intelligence branches of each military service, the State Department Bureau of Intelligence and Research, the intelligence units of the Treasury and Energy Departments, and the FBI. Before 1973, coordination for national estimates was done through the Office of National Estimates, and since then, through the National Intelligence Officers. The Intelligence Community Staff assists the Director of Central Intelligence in managing allocation of resources and reviewing the agencies' performance.

¹⁰ HSCI, *Hearings* (fn. 4), 656-57.

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characteristics of hierarchy, centralization, and specialization.¹¹ Yet it is precisely these characteristics that are the essence of any government. A related problem is the dominance of operational authorities over intelligence specialists, and the trade-off between objectivity and influence. Operators have more influence in decision making but are less capable of unbiased interpretation of evidence because they have a vested interest in the success of their operations; autonomous analysts are more disinterested and usually more objective, but lack influence. Senior generalists at the policy level often distrust or discount the judgments of analytic professionals and place more weight on reports from operational sources.¹² In response to this phenomenon, the suggestion has been made to *legislate* the requirement that decision makers consider analyses by the CIA's Intelligence Directorate (now the National Foreign Assessment Center) before establishing policy.¹³ Such a requirement would offer no more than wishful formalism. Statutory fiat cannot force human beings to value one source above another. "No power has yet been found," DCI Richard Helms has testified, "to force Presidents of the United States to pay attention on a continuing basis to people and papers when confidence has been lost in the originator."¹⁴ Moreover, principals tend to believe that they have a wider point of view than middle-level analysts and are better able to draw conclusions from raw data. That point of view underlies their fascination with current intelligence and their impatience with the reflective interpretations in "finished" intelligence.¹⁵

The dynamics of decision are also not conducive to analytic refinement. In a crisis, both data and policy outpace analysis, the ideal process of staffing and consultation falls behind the press of events, and careful estimates cannot be digested in time. As Winston Churchill recalled of the hectic days of spring 1940, "The Defence Committee of the War Cabinet sat almost every day to discuss the reports of the Military Co-ordination Committee and those of the Chiefs of Staff; and their conclusions or divergences were again referred to frequent Cabinets. All had to be explained or reexplained; and by the time this process was completed, the whole scene had often changed."¹⁶ Where there is ample time for decision, on the other hand, the previously mentioned bureaucratic impediments gain momentum.¹⁷ Just as information processing is frustrated by constraints on the time that harried principals can spend scrutinizing analytic papers, it is constrained by the funds that a government can spend. To which priorities should scarce resources be allocated? The Schlesinger Report of 1971, which led to President Nixon's reorganization of U.S. intelligence, noted that criticisms of analytic products were often translated into demands for more

¹¹ Wilensky, *Organizational Intelligence* (New York: Basic Books 1967), 42-62, 126, 179.

¹² *Ibid.*, *passim*. The counterpoint of Cooper (fn. 5) and McGarvey (fn. 5) presents a perfect illustration.

¹³ Graham Allison and Peter Szanton, *Remaking Foreign Policy: The Organizational Connection* (New York: Basic Books 1976), 204.

¹⁴ Quoted in SSCI, *Final Report* (fn. 7), I, 82.

¹⁵ *Ibid.*, 267, 276; SSCI, *Staff Report, Covert Action in Chile 1963-1973*, 94th Cong., 1st sess., 1975, 48-49. The Senate Committee deplored the tendency of decision makers to focus on the latest raw data rather than on refined analyses, a practice that contributed to the intelligence failure in the 1974 Cyprus crisis. SSCI, *Final Report* (fn. 7), I, 443. But the failure in the October War was largely due to the *reverse* phenomenon: disregarding warning indicators because they contradicted finished intelligence that minimized the possibility of war. HSCI Draft Report (fn. 4), 78; Ben-Zvi (fn. 4), 386, 394; Perlmutter (fn. 4), 453.

¹⁶ Churchill, *The Gathering Storm* (Boston: Houghton Mifflin 1948), 587-88.

¹⁷ "Where the end is knowledge, as in the scientific community, time serves intelligence; where the end is something else—as in practically every organization but those devoted entirely to scholarship—time subverts intelligence, since in the long run, the central institutionalized structures and aims (the maintenance of authority, the accommodation of departmental rivalries, the service of established doctrine) will prevail." Wilensky (fn. 11), 77.

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extensive collection of data, but "Seldom does anyone ask if a further reduction in uncertainty, however small, is worth its cost."¹⁸ Authorities do not always know, however, which issues require the greatest attention and which uncertainties harbor the fewest potential threats. Beyond the barriers that authority, organization, and scarcity pose to intelligence lie more fundamental and less remediable intellectual sources of error.

1. *Ambiguity of evidence.* Intelligence veterans have noted that "estimating is what you do when you do not know,"¹⁹ but "it is inherent in a great many situations that after reading the estimate, you will still not know."²⁰ These observations highlight an obvious but most important obstacle to accuracy in analysis. It is the role of intelligence to extract certainty from uncertainty and to facilitate coherent decision in an incoherent environment. (In a certain and coherent environment there is less need for intelligence.) To the degree they reduce uncertainty by extrapolating from evidence riddled with ambiguities, analysts risk oversimplifying reality and desensitizing the consumers of intelligence to the dangers that lurk within the ambiguities; to the degree they do not resolve ambiguities, analysts risk being dismissed by annoyed consumers who see them as not having done their job. Uncertainty reflects inadequacy of data, which is usually assumed to mean *lack* of information. But ambiguity can also be aggravated by an *excess* of data. In attack warning, there is the problem of "noise" and deception; in operational evaluation (particularly in a war such as Vietnam), there is the problem of overload from the high volume of finished analyses, battlefield statistics, reports, bulletins, reconnaissance, and communications intercepts flowing upward through multiple channels at a rate exceeding the capacity of officials to absorb or scrutinize them judiciously. (From the CIA alone, the White House received current intelligence dailies, Weekly Reports, daily Intelligence Information Cables, occasional Special Reports and specific memoranda, and analyses from the CIA Vietnam Working Group.) Similarly, in estimates for defense planning, there is the problem of innumerable and endlessly refined indices of the strategic balance, and the dependence of assessments of capabilities on complex and variable assumptions about the doctrine, scenarios, and intentions that would govern their use.

Because it is the job of decision makers to decide, they cannot react to ambiguity by deferring judgment.²¹ When the problem is an environment that lacks clarity, an overload of conflicting data, and lack of time for rigorous assessment of sources and validity, ambiguity abets instinct and allows intuition to drive analysis. Intelligence can fail because the data are too permissive for policy judgment rather than too constraining. When a welter of fragmentary evidence offers support to various interpretations, ambiguity is exploited by wishfulness. The greater the ambiguity, the greater the impact of preconceptions.²² (This point should be distinguished from the

¹⁸ Quoted in SSCI, *Final Report* (fn. 7), I, 274.

¹⁹ Sherman Kent, "Estimates and Influence," *Foreign Service Journal*, XLVI (April 1969), 17.

²⁰ Hughes (fn. 2), 43.

²¹ "The textbooks agree, of course, that we should only believe reliable intelligence, and should never cease to be suspicious, but what is the use of such feeble maxims? They belong to that wisdom which for want of anything better scribblers of systems and compendia resort to when they run out of ideas." Carl von Clausewitz, *On War*, ed. and trans. by Michael Howard and Peter Paret (Princeton: Princeton University Press 1976), 117.

²² Robert Jervis, *The Logic of Images in International Relations* (Princeton: Princeton University Press 1970), 132; Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press 1976), chap. 4; Floyd Allport, *Theories of Perception and the Concept of Structure*, cited in Shlaim (fn. 2), 358. Cognitive theory suggests that uncertainty provokes decision makers to separate rather than integrate their values, to deny that inconsistencies between values exist, and even to see contradictory values as mutually supportive. John Steinbruner, *The Cybernetic Theory of Decision* (Princeton: Princeton University Press 1974), 105-8.

theory of cognitive dissonance, which became popular with political scientists at the time it was being rejected by psychologists.)²³ There is some inverse relation between the importance of an assessment (when uncertainty is high) and the likelihood that it will be accurate. Lyndon Johnson could reject pessimistic NIE's on Vietnam by inferring more optimistic conclusions from the reports that came through command channels on pacification, interdiction, enemy casualties, and defections. Observers who assume Soviet malevolence focus on analyses of strategic forces that emphasize missile throw-weight and gross megatonnage (Soviet advantages); those who assume more benign Soviet intentions focus on analyses that emphasize missile accuracy and numbers of warheads (U.S. advantages). In assessing the naval balance, Secretary of Defense Rumsfeld focused on numbers of ships (Soviet lead), and Congressman Les Aspin, a critic of the Pentagon, focused on total tonnage (U.S. lead).

2. Ambivalence of judgment. Where there are ambiguous and conflicting indicators (the context of most failures of intelligence), the imperatives of honesty and accuracy leave a careful analyst no alternative but ambivalence. There is usually *some* evidence to support *any* prediction. For instance, the CIA reported in June 1964 that a Chinese instructor (deemed not "particularly qualified to make this remark") had told troops in a course in guerrilla warfare, "We will have the atom bomb in a matter of months."²⁴ Several months later the Chinese did perform their first nuclear test. If the report had been the only evidence, should analysts have predicted the event? If they are not to make a leap of faith and ignore the data that do not mesh, analysts will issue estimates that waffle. In trying to elicit nuances of probability from the various possibilities not foreclosed by the data, cautious estimates may reduce ambivalence, but they may become Delphic or generalized to the point that they are not useful guides to decision. (A complaint I have heard in conversations with several U.S. officials is that many past estimates of Soviet objectives could substitute the name of any other great power in history—Imperial Rome, 16th-century Spain, Napoleonic France—and sound equally valid.) Hedging is the legitimate intellectual response to ambiguity, but it can be politically counterproductive, if the value of intelligence is to shock consumers out of wishfulness and cognitive insensitivity. A wishful decision maker can fasten onto that half of an ambivalent analysis that supports his predisposition.²⁵ A more objective official may escape this temptation, but may consider the estimate useless because it does not provide "the answer."

3. Atrophy of reforms. Disasters always stimulate organizational changes designed to avert the same failures in the future. In some cases these changes work. In many instances, however, the changes persist formally but erode substantively. Standard procedures are constant. Dramatic failures occur only intermittently. If the reforms in procedure they have provoked do not fulfill day-to-day organizational needs—or if, as often happens, they complicate operations and strain the organization's resources—they fall into disuse or become token practices. After the

²³ See William J. McGuire, "Selective Exposure: A Summing Up," in R. P. Abelson and others, eds., *Theories of Cognitive Consistency* (Chicago: Rand McNally 1968), and Irving L. Janis and Leon Mann, *Decision Making: A Psychological Analysis of Conflict, Choice, and Commitment* (New York: Free Press 1977), 213-14.

²⁴ CIA Intelligence Information Cable, "Remarks of the Chief of the Nanking Military Academy and Other Chinese Leaders on the Situation in South Vietnam," June 25, 1964, in Lyndon B. Johnson Library National Security Files, Vietnam Country File [hereafter cited as LBJS/NSF-VNCF], Vol. XII, item 55.

²⁵ See for example, U.S., Department of Defense, *The Senator Gravel Edition: The Pentagon Papers* (Boston: Beacon Press 1971) [hereafter cited as *Pentagon Papers*], Vol. II, 99; Frances Fitzgerald, *Fire in the Lake* (Boston: Atlantic-Little, Brown 1972), 364; Special National Intelligence Estimate 53-64, "Chances for a Stable Government in South Vietnam," September 18, 1964, and McGeorge Bundy's covering letter to the President, in LBJS/NSF-VNCF, Vol. XIII, item 48.

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postmortem of North Korea's downing of a U.S. EC-121 monitoring aircraft in 1969, there was, for several months, a great emphasis on risk assessments for intelligence collection missions. Generals and admirals personally oversaw the implementation of new procedures for making the assessments. Six months later, majors and captains were doing the checking. "Within a year the paperwork was spot-checked by a major and the entire community slid back to its old way of making a 'quick and dirty' rundown of the JCS criteria when sending in reconnaissance mission proposals."²⁶ The downing of the U-2 over the Soviet Union in 1960 and the capture of the intelligence ship *Pueblo* in 1968 had been due in part to the fact that the process of risk assessment for specific collection missions, primarily the responsibility of overworked middle-level officers, had become ponderous, sloppy, or ritualized.²⁷ At a higher level, a National Security Council Intelligence Committee was established in 1971 to improve responsiveness of intelligence staff to the needs of policy makers. But since the subcabinet-level consumers who made up the committee were pressed by other responsibilities, it lapsed in importance and was eventually abolished.²⁸ A comparable NSC committee that *did* serve tangible day-to-day needs of consumers to integrate intelligence and policy—the Verification Panel, which dealt with SALT—was more effective, but it was issue-oriented rather than designed to oversee the intelligence process itself. Organizational innovations will not improve the role of intelligence in policy unless they flow from the decision makers' views of their own needs and unless they provide frequent practical benefits.

None of these three barriers are accidents of structure or process. They are inherent in the nature of intelligence and the dynamics of work. As such, they constitute severe constraints on the efficacy of structural reform.

III. THE ELUSIVENESS OF SOLUTIONS

If they do not atrophy, most solutions proposed to obviate intelligence dysfunctions have two edges: in reducing one vulnerability, they increase another. After the seizure of the *Pueblo*, the Defense Intelligence Agency (DIA) was reprimanded for misplacing a message that could have prevented the incident. The colonel responsible developed a careful microfilming operation in the message center to ensure a record of transmittal of cables to authorities in the Pentagon. Implementing this check, however, created a three-to-four hour delay—another potential source of failure—in getting cables to desk analysts whose job was to keep reporting current.²⁹ Thus, procedural solutions often constitute two steps forward and one step back; organizational fixes cannot transcend the basic barriers. The lessons of Pearl Harbor led to the establishment of a Watch Committee and National Indications Center in Washington. Although this solution eliminated a barrier in the communication system, it did not prevent the failure of timely alert to the Chinese intervention in Korea or the 1973 October War, because it did not eliminate the ambiguity barrier. (Since then, the Watch Committee has been replaced by the DCI's

²⁶ Patrick J. McGarvey, *CIA: The Myth and the Madness* (Baltimore: Penguin 1974), 16.

²⁷ David Wise and Thomas B. Ross, *The U-2 Affair* (New York: Random House 1962), 56, 176, 180; Trevor Armbrister, *A Matter of Accountability* (New York: Coward-McCann 1970), 116-18, 141-45, 159, 187-95; U.S., Congress, House, Committee on Armed Services, *Report, Inquiry Into the U.S.S. Pueblo and EC-121 Plane Incidents* [hereafter cited as *Pueblo and EC-121 Report*], 91st Cong., 1st sess., 1969, 1622-24, 1650-51; U.S., Congress, House, Committee on Armed Services, *Hearings, Inquiry Into the U.S.S. Pueblo and EC-121 Plane Incidents* [hereafter cited as *Pueblo and EC-121 Hearings*], 91st Cong., 1st sess., 1969, 693-94, 699-700, 703-7, 714, 722, 734, 760, 773-78, 815-16.

²⁸ SSCI, *Final Report* (fn. 7), I, 61-62; HSCI Draft Report (fn. 4), 82.

²⁹ McGarvey (fn. 26), 16.

Strategic Warning Staff.) DIA was reorganized four times within its first ten years; yet it continued to leave most observers dissatisfied. The Agranat Commission's review of Israel's 1973 intelligence failure produced proposals for institutional reform that are striking because they amount to copying the American system of the same time—which had failed in exactly the same way as the Israeli system.³⁰ Reform is not hopeless, but hopes placed in solutions most often proposed—such as the following—should be circumscribed.

1. *Assume the worst.* A common reaction to traumatic surprise is the recommendation to cope with ambiguity and ambivalence by acting on the most threatening possible interpretations. If there is *any* evidence of threat, assume it is valid, even if the *apparent* weight of contrary indicators is greater. In retrospect, when the point of reference is an actual disaster attributable to a mistaken calculation of probabilities, this response is always justifiable, but it is impractical as a guide to standard procedure. Operationalizing worst-case analysis requires extraordinary expense; it risks being counterproductive if it is effective (by provoking enemy countermeasures or pre-emption), and it is likely to be ineffective because routinization will discredit it. Many Israeli observers deduced from the 1973 surprise that defense planning could only rest on the assumption that no attack warning will be available, and that precautionary mobilization should always be undertaken even when there is only dubious evidence of impending Arab action.³¹ Similarly, American hawks argue that if the Soviets' intentions are uncertain, the only prudent course is to assume they are seeking the capability to win a nuclear war.

In either case, the norm of assuming the worst poses high financial costs. Frequent mobilizations strain the already taut Israeli economy. Moreover, countermobilization can defeat itself. Between 1971 and 1973, the Egyptians three times undertook exercises similar to those that led to the October attack; Israel mobilized in response, and nothing happened. It was the paradox of self-negating prophecy.³² The Israeli Chief of Staff was sharply criticized for the unnecessary cost.³³ The danger of hypersensitivity appeared in 1977, when General Gur believed Sadat's offer to come to Jerusalem to be a camouflage for an Egyptian attack; he began Israeli maneuvers in the Sinai, which led Egypt to begin maneuvers of its own, heightening the risk of accidental war.³⁴ To estimate the requirements for deterrence and defense, worst-case assumptions present an open-ended criterion. The procurement of all the hedges possible for nuclear war-fighting—large increments in offensive forces, alert status, hardening of command-control-and-communications, active and passive defenses—

³⁰ Shlaim (fn. 2), 375-77. The proposals follow, with their U.S. analogues noted in parentheses: appoint a special intelligence adviser to the Prime Minister (Director of Central Intelligence) to supplement the military chief of intelligence; reinforce the Foreign Ministry's research department (Bureau of Intelligence and Research); more autonomy for non-military intelligence (CIA); amend rules for transmitting raw intelligence to research agencies, the Defense Minister, and the Prime Minister (routing of signals intelligence from the National Security Agency); restructure military intelligence (creation of DIA in 1961); establish a central evaluation unit (Office of National Estimates). On the U.S. intelligence failure in 1973, see the HSCI Draft Report (fn. 4), 78-79.

³¹ Shlaim (fn. 2), 379; Handel (fn. 4), 62-63.

³² *Ibid.*, 55.

³³ Shlaim (fn. 2), 358-59. The Israeli command estimated a higher probability of attack in May 1973 than it did in October. Having been proved wrong in May, Chief of Staff Elazar lost credibility in challenging intelligence officers, complained that he could no longer argue effectively against them, and consequently was unable to influence his colleagues when he was right. Personal communication from Michael Handel, November 15, 1977.

³⁴ *Washington Post*, November 27, 1977, p. A17.

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would add billions to the U.S. defense budget. Moreover, prudent hedging in policy should be distinguished from net judgment of probabilities in estimates.³⁵

Alternatively, precautionary escalation or procurement may act as self-fulfilling prophecies, either through a catalytic spiral of mobilization (*à la* World War I) or an arms race that heightens tension, or doctrinal hedges that make the prospect of nuclear war more "thinkable." Since evidence for the "action-reaction" hypothesis of U.S. and Soviet nuclear policies is meager, and arms races can sometimes be stabilizing rather than dangerous, the last point is debatable. Still, a large unilateral increase in strategic forces by either the United States or the Soviet Union would, at the least, destroy the possibility of gains desired from SALT. A surprise attack or defeat make the costs of *underestimates* obvious and dramatic; the unnecessary defense costs due to *overestimates* can only be surmised, since the minimum needed for deterrence is uncertain. Worst-case analysis as a standard norm would also exacerbate the "cry wolf" syndrome. *Unambiguous* threat is not an intelligence problem; rather, the challenge lies in the response to fragmentary, contradictory, and dubious indicators. Most such indicators turn out to be false alarms. Analysts who reflexively warn of disaster are soon derided as hysterical. General William Westmoreland recalled that the warnings that had been issued before the 1968 Tet Offensive were ignored. U.S. headquarters in Saigon had each year predicted a winter-spring offensive, "and every year it had come off without any dire results. . . . Was not the new offensive to be more of the same?"³⁶

Given the experience of intelligence professionals that most peacetime indicators of suspicious enemy activity lead to nothing, what colonel who has the watch some night will risk "lighting up the board" in the White House simply on the basis of weak apprehension? How many staffers will risk waking a tired President, especially if they have done so before and found the action to be needless? How many distracting false alarms will an overworked President tolerate before he makes it clear that aides should exercise discretion in bothering him? Even if worst-case analysis is promulgated in principle, it will be compromised in practice. Routinization corrodes sensitivity. Every day that an expected threat does not materialize dulls receptivity to the reality of danger. As Roberta Wohlstetter wrote of pre-Pearl Harbor vigilance, "We are constantly confronted by the paradox of pessimistic realism of phrase coupled with loose optimism in practice."³⁷ Seeking to cover all contingencies, worst-case analysis loses focus and salience; by providing a theoretical guide for everything, it provides a practical guide for very little.

2. *Multiple advocacy.* Blunders are often attributed to decision makers' inattention to unpopular viewpoints or to a lack of access to higher levels of authority by dissident analysts. To reduce the chances of such mistakes, Alexander George proposes institutionalizing a balanced, open, and managed process of debate, so that no relevant assessments will be submerged by unchallenged premises or the bureaucratic strength of opposing officials.³⁸ The goal is unobjectionable, and formalized multiple advocacy certainly would help, not hinder. But confidence that it will help systematically and substantially should be tentative. In a loose sense, there has usually

³⁵ Raymond Garthoff, "On Estimating and Imputing Intentions," *International Security*, 11 (Winter 1978), 22.

³⁶ Westmoreland, *A Soldier Reports* (Garden City, N.Y.: Doubleday 1976), 316. See the postmortem by the President's Foreign Intelligence Advisory Board, quoted in Herbert Y. Schandler, *The Unmaking of a President* (Princeton: Princeton University Press 1977), 70, 76, 79-80.

³⁷ Wohlstetter (fn. 4), 69.

³⁸ George, "The Case for Multiple Advocacy in Making Foreign Policy," *American Political Science Review*, Vol. 66 (September 1972). My usage of the term multiple advocacy is looser than George's.

been multiple advocacy in the U.S. policy process, but it has not prevented mistakes in deliberation or decision. Lyndon Johnson did not decide for limited bombing and gradual troop commitment in Vietnam in 1965 because he was not presented with extensive and vigorous counterarguments. He considered seriously (indeed solicited) Under Secretary of State George Ball's analysis, which drew on NIE's and lower-level officials' pessimistic assessments that any escalation would be a mistake. Johnson was also well aware of the arguments by DCI John McCone and the Air Force from the other extreme—that massive escalation in the air war was necessary because gradualism would be ineffective.³⁹ The President simply chose to accept the views of the middle-of-the-road opponents of *both* Ball and McCone.

To the extent that multiple advocacy works, and succeeds in maximizing the number of views promulgated and in supporting the argumentative resources of all contending analysts, it may simply highlight ambiguity rather than resolve it. In George's ideal situation, the process would winnow out unsubstantiated premises and assumptions about ends-means linkages. But in the context of data overload, uncertainty, and time constraints, multiple advocacy may in effect give all of the various viewpoints an aura of empirical respectability and allow a leader to choose whichever accords with his predisposition.⁴⁰ The efficacy of multiple advocacy (which is greatest under conditions of manageable data and low ambiguity) may vary inversely with the potential for intelligence failure (which is greatest under conditions of confusing data and high uncertainty). The process could, of course, bring to the surface ambiguities where false certainty had prevailed; in these cases, it would be as valuable as George believes. But if multiple advocacy increases ambivalence and leaders do *not* indulge their instincts, it risks promoting conservatism or paralysis. Dean Acheson saw danger in presidential indecisiveness aggravated by debate: "'I know your theory,' he grumbled to Neustadt. 'You think Presidents should be warned. You're wrong. Presidents should be given confidence.' "⁴¹ Even Clausewitz argued that deference to intelligence can frustrate bold initiative and squander crucial opportunities. Critics charged Henry Kissinger with crippling U.S. intelligence by refusing to keep analysts informed of his intimate conversations with foreign leaders.⁴² To do so, however, would have created the possibility of leaks and might thereby have crippled his diplomatic maneuvers. It is doubtful that Nixon's initiative to China could have survived prior debate, dissent, and analysis by the bureaucracy.

It is unclear that managed multiple advocacy would yield markedly greater benefits than the redundancy and competitiveness that have long existed. (At best it would perfect the "market" of ideas in the manner that John Stuart Mill believed

³⁹ Henry F. Graff, *The Tuesday Cabinet* (Englewood Cliffs, N.J.: Prentice-Hall 1970), 68-71; Leslie H. Gelb with Richard K. Betts, *The Irony of Vietnam: The System Worked* (Washington, D.C.: Brookings, forthcoming), chap. 4; Ball memorandum of October 5, 1964, reprinted as "Top Secret: The Prophecy the President Rejected," *Atlantic Monthly*, Vol. 230 (July 1972); McCone, memorandum of April 2, 1965, in LB JL/N\$F-VNCF, *Troop Decision* folder, item 14b.

⁴⁰ Betts (fn. 5), 199-202; Schandler (fn. 36), 177. George (fn. 38), 759, stipulates that multiple advocacy requires "no major maldistribution" of power, influence, competence, information, analytic resources, and bargaining skills. But, except for resources and the right to representation, the foregoing are subjective factors that can rarely be equalized by design. If they are equalized, in the context of imperfect data and time pressure, erroneous arguments as well as accurate ones will be reinforced. Non-expert principals have difficulty arbitrating intellectually between experts who disagree.

⁴¹ Quoted in Steinbrunner (fn. 22), 332.

⁴² Clausewitz (fn. 21), 117-18; HSCI Hearings (fn. 4), 634-36; William J. Barnds, "Intelligence and Policymaking in an Institutional Context," in U.S., Commission on the Organization of the Government for the Conduct of Foreign Policy [hereafter cited as Murphy Commission], *Appendices* (Washington, D.C.: G.P.O., June 1975), Vol. VII, 32.

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made liberalism conducive to the emergence of truth.) The first major reorganization of the American intelligence community in 1946-1947 emphasized centralization in order to avert future Pearl Harbors caused by fragmentation of authority; the latest reorganization (Carter's 1977 extension of authority of the Director of Central Intelligence over military intelligence programs) emphasized centralization to improve efficiency and coherence. Yet decentralization has always persisted in the overlapping division of labor between several separate agencies. Recent theorists of bureaucracy see such duplication as beneficial because competition exposes disagreement and presents policy makers with a wider range of views. Redundancy inhibits consensus, impedes the herd instinct in the decision process, and thus reduces the likelihood of failure due to unchallenged premises or cognitive errors. To ensure that redundancy works in this way, critics oppose a process that yields coordinated estimates—negotiated to the least common denominator, and cleared by all agencies before they are passed to the principals. George's "custodian" of multiple advocacy could ensure that this does not happen. There are, of course, trade-off costs for redundancy. Maximization of competition limits specialization. In explaining the failure of intelligence to predict the 1974 coup in Portugal, William Hyland pointed out, "if each of the major analytical components stretch their resources over the same range, there is the risk that areas of less priority will be superficially covered."⁴³

The problem with arguing that the principals themselves should scrutinize numerous contrasting estimates in their integrity is that they are constantly overwhelmed by administrative responsibilities and "action items"; they lack the time to read, ponder, and digest that large an amount of material. Most intelligence products, even NIE's, are never read by policy makers; at best, they are used by second-level staffers as background material for briefing their seniors.⁴⁴ Consumers want previously coordinated analyses in order to save time and effort. In this respect, the practical imperatives of day-to-day decision contradict the theoretical logic of ideal intelligence.

3. *Consolidation*. According to the logic of estimative redundancy, more analysis is better than less. Along this line of reasoning, Senate investigators noted critically that, as of fiscal year 1975, the U.S. intelligence community still allocated 72 percent of its budget for collection of information, 19 percent for processing technical data, and less than 9 percent for production of finished analyses. On the other hand according to the logic of those who focus on the time constraints of leaders and the confusion that results from innumerable publications, quantity counteracts quality. The size of the CIA's intelligence directorate and the complexity of the production process "precluded close association between policymakers and analysts, between the intelligence product and policy informed by intelligence analysis."⁴⁵ For the sake of clarity and acuity, the intelligence bureaucracy should be streamlined.

This view is consistent with the development of the Office of National Estimates (ONE), which was established in 1950 and designed to coordinate the contributions of the various organs in the intelligence community for the Director of Central Intelligence. DCI Walter Bedell Smith envisioned an operation of about a thousand people. But William L. Langer, the scholar Smith imported to organize ONE, wanted

⁴³ HSCI, *Hearings* (fn. 4), 778.

⁴⁴ SSCI, *Final Report* (fn. 7), IV, 57; Roger Hilsman, *Strategic Intelligence and National Decisions* (Glencoe, Ill.: Free Press 1956), 40. During brief service as just a low-level staff member of the National Security Council, even I never had time to read all the intelligence analyses relevant to my work.

⁴⁵ SSCI, *Final Report* (fn. 7), I, 344, and IV, 95 (emphasis deleted).

a tight group of excellent analysts and a personnel ceiling of fifty. Langer prevailed, and though the number of staff members in ONE crept upwards, it probably never exceeded a hundred in its two decades of existence.⁴⁶ Yet ONE could not eliminate the complexity of the intelligence process; it could only coordinate and integrate it for the production of National Intelligence Estimates. Other sources found conduits to decision makers (to Cabinet members through their own agencies, or to the President through the National Security Council). And some policy makers, though they might dislike the cacophony of multiple intelligence agencies, were suspicious of the consolidated NIE's, knowing that there was pressure to compromise views in order to gain agreement. Over time, the dynamics of bureaucracy also blunted the original objectives of ONE's founder. From a cosmopolitan elite corps, it evolved into an insular unit of senior careerists from the CIA. The National Intelligence Officer system that replaced ONE reduced the number of personnel responsible for coordinating NIE's, but has been criticized on other grounds such as greater vulnerability to departmental pressures. Bureaucratic realities have frustrated other attempts to consolidate the intelligence structure. The Defense Intelligence Agency was created in 1961 to unify Pentagon intelligence and reduce duplicative activities of the three service intelligence agencies, but these agencies regenerated themselves; in less than a decade they were larger than they had been before DIA's inception.⁴⁷

The numerous attempts to simplify the organization of the analytic process thus have not solved the major problems. Either the streamlining exercises were short-lived, and bureaucratization crept back, or the changes had to be moderated to avoid the new dangers they entailed. Contraction is inconsistent with the desire to minimize failure by "plugging holes" in intelligence, since compensating for an inadequacy usually requires *adding* personnel and mechanisms; pruning the structure that contributes to procedural sluggishness or complexity may create lacunae in substantive coverage.

4. *Devil's advocacy.* Multiple advocacy ensures that all views held by individuals within the analytic system will be granted serious attention. Some views that should receive attention, however, may not be held by anyone within the system. Virtually no analysts in Israel or the United States believed the Arabs would be "foolish" enough to attack in 1973. Many observers have recommended institutionalizing dissent by assigning to someone the job of articulating apparently ridiculous interpretations to ensure that they are forced into consideration. Establishing an official devil's advocate would probably do no harm (although some argue that it may perversely facilitate consensus-building by domesticating true dissenters or providing the illusory comfort that all views have been carefully examined;⁴⁸ worse, it might delude decision makers into believing that *uncertainties* have been resolved). But in any case, the role is likely to atrophy into a superfluous or artificial ritual. By the definition of the job, the devil's advocate is likely to be dismissed by decision makers as a sophist who only makes an argument because he is supposed to, not because of its real merits. Institutionalizing devil's advocacy is likely to be perceived in practice as institutionalizing the "cry wolf" problem; "There are limits to the utility of a 'devil's advocate' who is not a true devil."⁴⁹ He becomes someone to be indulged and disregarded. Given its rather sterile

⁴⁶ Ray S. Cline, *Secrets, Spies, and Scholars* (Washington, D.C.: Acropolis 1976), 20.

⁴⁷ Gilbert W. Fitzhugh and others, *Report to the President and the Secretary of Defense on the Department of Defense, By the Blue Ribbon Defense Panel* (Washington, D.C.: G.P.O., July 1970), 45-46.

⁴⁸ Alexander George, "The Devil's Advocate: Uses and Limitations," Murphy Commission, Appendices (fn. 42), II, 84-85; Jervis, *Perception and Misperception* (fn. 22), 417.

⁴⁹ *Ibid.*, 416.

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definition, the role is not likely to be filled by a prestigious official (who will prefer more "genuine" responsibility); it will therefore be easier for policy makers to dismiss the arguments. In order to avert intelligence failures, an analyst is needed who tells decision makers what they don't want to hear, dampening the penchant for wishful thinking. But since it is the job of the devil's advocate to do this habitually, and since he is most often wrong (as would be inevitable, since otherwise the conventional wisdom would eventually change), he digs his own grave. If the role is routinized and thus ritualized, it loses impact; but if it is not routinized, there can be no assurance that it will be operating when it is needed.

Despite the last point, which is more important in attack warning than in operational evaluation or defense planning, there is a compromise that offers more realistic benefits: *ad hoc* utilization of "real devils." This selective or biased form of multiple advocacy may be achieved by periodically giving a platform within the intelligence process to minority views that can be argued more persuasively by prestigious analysts outside the bureaucracy. This is what the President's Foreign Intelligence Advisory Board and DCI George Bush did in 1976 by commissioning the "Team B" critique of NIE's on Soviet strategic objectives and capabilities. Dissenters within the intelligence community who were skeptical of Soviet intentions were reinforced by a panel of sympathetic scholars, with a mandate to produce an analysis of their own.⁵⁰ This controversial exercise, even if it erred in many of its own ways (as dovish critics contend), had a major impact in promoting the re-examination of premises and methodology in U.S. strategic estimates. The problem with this option is that it depends on the political biases of the authorities who commission it. If it were balanced by a comparable "Team C" of analysts at the opposite extreme (more optimistic about Soviet intentions than the intelligence community consensus), the exercise would approach regular multiple advocacy, with the attendant limitations of that solution. Another variant would be intermittent designation of devil's advocates in periods of crisis, when the possibility of disaster is greater than usual. Since the role would then be fresh each time, rather than ritualized, the advocate might receive a more serious hearing. The problem here is that receptivity of decision makers to information that contradicts preconceptions varies inversely with their personal commitments, and commitments grow as crisis progresses.⁵¹

5. *Sanctions and incentives.* Some critics attribute intelligence failures to dishonest reporting or the intellectual mediocrity of analysts. Suggested remedies include threats of punishment for the former, and inducements to attract talent to replace the latter. Other critics emphasize that, will or ability aside, analytic integrity is often submerged by the policy makers' demands for intelligence that suits them; "the NIEs ought to be responsive to the evidence, not the policymaker."⁵² Holders of this point of view would institutionalize the analysts' autonomy. Unobjectionable in principle (though if analysts are totally unresponsive to the consumer, he will ignore them), these implications cannot easily be operationalized without creating as many problems as they solve.

Self-serving operational evaluations from military sources, such as optimistic reports on progress in the field in Vietnam or pessimistic strategic estimates, might

⁵⁰ U.S., Congress, Senate, Select Committee on Intelligence, *Report, The National Intelligence Estimates A-B Team Episode Concerning Soviet Capability and Objectives*, 95th Cong. 2d sess., 1978; *New York Times*, December 26, 1976, pp. 1, 14; *Washington Post*, January 2, 1977, pp. A1, A4.

⁵¹ George H. Poteat, "The Intelligence Gap: Hypotheses on the Process of Surprise," *International Studies Notes*, 111 (Fall 1976), 15.

⁵² Cline (fn. 46), 140.

indeed be obviated if analysts in DIA, the service intelligence agencies, and command staffs were credibly threatened with sanctions (firing, nonpromotion, reprimand, or disgrace). Such threats theoretically could be a countervailing pressure to the career incentives analysts have to promote the interests of their services. But, except in the most egregious cases, it is difficult to apply such standards without arbitrariness and bias, given the problem of ambiguity; it simply encourages an alternative bias or greater ambivalence. Moreover, military professionals would be in an untenable position, pulled in opposite directions by two sets of authorities. To apply the sanctions, civil authorities would have to violate the most hallowed military canon by having civilian intelligence officials interfere in the chain of command. In view of these dilemmas, it is easier to rely on the limited effectiveness of redundancy or multiple advocacy to counteract biased estimates.

Critics concerned with attracting better talent into the analytic bureaucracy propose to raise salaries and to provide more high-ranking positions (supergrades) to which analysts can aspire. Yet American government salaries are already very high by academic standards. Those who attribute DIA's mediocrity (compared to CIA), to an insufficient allocation of supergrades and a consequent inability to retain equivalent personnel are also mistaken; as of 1975 the difference in the grade structures of DIA and CIA had been negligible.⁵³ And the fact that CIA analysts cannot rise to a supergrade position (GS-16 to 18) without becoming administrators is not convincing evidence that good analysts are underpaid; GS-15 salaries are higher than the maximum for most tenured professors.

Non-military analysts, or high-ranking soldiers with no promotions to look forward to, have fewer professional crosspressures to contend with than military intelligence officers. But an analyst's autonomy varies inversely with his influence, andhortatory injunctions to be steadfast and intellectually honest cannot ensure that he will be; they cannot transcend political realities or the idiosyncrasies of leaders. Richard Helms notes that "there is no way to insulate the DCI from unpopularity at the hands of Presidents or policymakers if he is making assessments which run counter to administrative policy. That is a built-in hazard of the job. Sensible Presidents understand this. On the other hand they are human too." Integrity untinged by political sensitivity courts professional suicide. If the analyst insists on perpetually bearing bad news, he is likely to be beheaded. Helms himself succumbed to policy makers' pressures in compromising estimates of the MIRV capabilities of the Soviet SS-9 missile in 1969, and the prospects for Cambodia in 1970.⁵⁴ The same practical psychological constraints are reflected in an incident in which Chief of Naval Operations Elmo Zumwalt, who had already infuriated Nixon and Kissinger several times with his strategic estimates, was determined to present yet another unwelcome analysis; Secretary of Defense Schlesinger dissuaded him with the warning, "To give a briefing like that in the White House these days would be just like shooting yourself in the foot."⁵⁵

6. Cognitive rehabilitation and methodological consciousness. The intertwining of analysis and decision and the record of intelligence failures due to mistaken

⁵³ SSCI, *Final Report* (fn. 7), I, 352. A valid criticism is that military personnel systems and promotion standards penalized intelligence officers, thus encouraging competent officers to avoid intelligence assignments. This situation was rectified in the service intelligence agencies by the early 1970s, but not within DIA. *Ibid.*; Betts (fn. 5), 196-97.

⁵⁴ SSCI, *Final Report* (fn. 7), I, 77-82. See also U.S., Congress, Senate, Committee on Foreign Relations, *Hearings, National Security Act Amendment*, 92d Cong., 2d sess., 1972, 14-24.

⁵⁵ Zumwalt, *On Watch* (New York: Quadrangle 1976), 459.

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preconceptions and unexamined assumptions suggest the need to reform the intelligence consumers' attitudes, awareness, and modes of perception. If leaders were made self-conscious and self-critical about their own psychologies, they might be less vulnerable to cognitive pathologies. This approach to preventing intelligence failure is the most basic and metaphysical. If policy makers focused on the methodologies of competing intelligence producers, they would be more sensitive to the biases and leaps of faith in the analyses passed to them. "In official fact-finding . . . the problem is not merely to open up a wide range of policy alternatives but to create incentives for persistent criticism of evidentiary value."⁵⁶ Improvement would flow from mechanisms that force decision makers to make explicit rather than unconscious choices, to exercise judgment rather than engage in automatic perception, and to enhance their awareness of their own preconceptions.⁵⁷

Unlike organizational structure, however, cognition cannot be altered by legislation. Intelligence consumers are political men who have risen by being more decisive than reflective, more aggressive than introspective, and confident as much as cautious. Few busy activists who have achieved success by thinking the way that they do will change their way of thinking because some theorist tells them to. Even if they could be forced to confront scholarly evidence of the dynamics of misperception, it is uncertain that they could consistently internalize it. Preconception cannot be abolished; it is in one sense just another word for "model" or "paradigm"—a construct used to simplify reality, which any thinker needs in order to cope with complexity. There is a grain of truth in the otherwise pernicious maxim that an open mind is an empty mind. Moreover, the line between *perception* and *judgment* is very thin, and consumers cannot carefully scrutinize, compare, and evaluate the methodologies of competing analyses, for the same prosaic reason (the problem of expertise aside) that impedes many proposed reforms: they do not have the *time* to do so. Solutions that require principals to invest more attention than they already do are conceptually valid but operationally weak. Ideally, perhaps, each principal should have a Special Assistant for Rigor Enforcement.

Although most notable intelligence failures occur more often at the consuming than the producing end, it is impractical to place the burden for correcting those faults on the consumers. The most realistic strategy for improvement would be to have intelligence professionals anticipate the cognitive barriers to decision makers' utilization of their products. Ideally, the Director of Central Intelligence should have a theoretical temperament and personal skills in forcing unusual analyses to the attention of principals; he might act as George's "custodian" of the argumentation process. To fulfill this function, the DCI should be not only a professional analyst and an intellectual (of the twelve DCI's since 1946, only James Schlesinger met those criteria, and he served for only three months), but also a skilled bureaucratic politician. These qualifications seldom coincide. The DCI's coordinating staff and National Intelligence Officers should be adept at detecting, making explicit, and exposing to consumers the idiosyncrasies in the assessments of various agencies—the *reasons* that the focus and conclusions of the State Department's Bureau of Intelligence and Research differ from those of DIA, or of naval intelligence, or of the CIA. For such a procedure to work, the consumers would have to favor it (as opposed to negotiated consensual estimates that would save them more time). There is always a latent tension between what facilitates timely decision and what promotes thoroughness and accuracy in assessment. The fact that there is no guaranteed

⁵⁶ Wilensky (fn. 11), 164.

⁵⁷ Jervis, *Perception and Misperception* (fn. 22), 181-87.

prophylaxis against intelligence failures, however, does not negate the value of incremental improvements. The key is to see the problem of reform as one of modest refinements rather than as a systematic breakthrough.

IV. LIVING WITH FATALISM

Organizational solutions to intelligence failure are hampered by three basic problems: most procedural reforms that address specific pathologies introduce or accent other pathologies; changes in analytic processes can never fully transcend the constraints of ambiguity and ambivalence; and more rationalized information systems cannot fully compensate for the predispositions, perceptual idiosyncrasies, and time constraints of political consumers. Solutions that address the psychology and analytic style of decision makers are limited by the difficulty of changing human thought processes and day-to-day habits of judgment by normative injunction. Most theorists have thus resigned themselves to the hope of marginal progress, "to improve the 'batting average'—say from .275 to .301—rather than to do away altogether with surprise."⁵⁸

There is some convergence in the implications of all three ways of conceptualizing intelligence failures. Mistakes should be expected because the *paradoxes* are not resolvable; minor improvements are possible by reorganizing to correct *pathologies*; and despair is unwarranted because, seen *in perspective*, the record could be worse. Marginal improvements have, in fact, been steadily instituted since World War II. Although many have indeed raised new problems, most have yielded a net increase in the rationalization of the system. The diversification of sources of estimates of adversaries' military power has grown consistently, obviating the necessity to rely exclusively on military staffs. The resources and influence of civilian analysts of military data (principally in the CIA's Office of Strategic Research but also in its Directorate of Science and Technology) are unparalleled in any other nation's intelligence system. At the same time, the DCI's mechanism for coordinating the activities of all agencies—the Intelligence Community Staff—has grown and become more diverse and representative, and less an extension of the CIA, as more staffers have been added from the outside. In 1972, a separate Product Review Division was established within the staff to appraise the "objectivity, balance, and responsiveness" of intelligence studies on a regular basis. It has conducted postmortems of intelligence failures since then (the Yom Kippur War, the Cyprus crisis of 1974, the Indian nuclear test, and the seizure of the *Mayaguez*).⁵⁹ (Previously, postmortems had been conducted by the analysts who had failed, a procedure that hardly guaranteed objectivity.)

Within the Pentagon, capabilities for estimates relevant to planning were enhanced with the establishment of an office for Net Assessment, which analyzes the significance of foreign capabilities in comparison with U.S. forces. (CIA, DIA, and NIE's only estimate foreign capabilities.) Civilian direction of military intelligence was reinforced by an Assistant Secretary of Defense for Intelligence after the 1970 recommendation of the Fitzhugh Commission, and an Under Secretary for Policy in 1978. Experiments in improving communication between producers and consumers have been undertaken (such as, for example, the testing of a Defense Intelligence

⁵⁸ Knorr (fn. 1), 460.

⁵⁹ SSCI, *Final Report* (fn. 7), I, 276, and IV, 85; U.S., Congress, House, Committee on Appropriations, *Hearings, Supplemental Appropriations for Fiscal Year 1977*, 95th Cong., 2d sess., 1977, 515-621; *Washington Post*, February 15, 1977, p. A6; Paul W. Blackstock, "The Intelligence Community Under the Nixon Administration," *Armed Forces and Society*, 1 (February 1975), 238.

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Board in late 1976). The dominance of operators within the intelligence community has also waned—especially since the phasing out of paramilitary operations in Southeast Asia and the severe reductions in size and status of CIA's covert action branch that began in 1973. Dysfunctions in the military communications system, which contributed to crises involving intelligence collection missions in the 1960s (the Israeli attack on the U.S.S. *Liberty* and North Korea's seizure of the *Pueblo*) were alleviated (though not cured) by new routing procedures and by instituting an "optimal scanning system" in the Pentagon.⁶⁰ Statistical analyses of strategic power have become progressively more rigorous and comprehensive; as staffs outside the executive branch—such as the Congressional Budget Office—have become involved in the process, they have also become more competitive.⁶¹

Few of the changes in structure and process have generated more costs than benefits. (Some critics believe, however, that the abolition of the Office and Board of National Estimates and their replacement with National Intelligence Officers was a net loss.) But it is difficult to prove that they have significantly reduced the incidence of intelligence failure. In the area of warning, for instance, new sophisticated coordination mechanisms have recently been introduced, and since the institution at the time of the 1974 Cyprus crisis of DCI "alert memoranda"—"brief notices in a form which cannot be overlooked"⁶²—no major warning failure has occurred. But the period of testing is as yet too brief to demonstrate that these adaptations are more effective than previous procedures. In the area of operational evaluation, it is clear that there was greater consciousness of the limitations and cost-ineffectiveness of aerial bombardment during the Vietnam War than there had been in Korea, due largely to the assessments made by the offices of Systems Analysis and International Security Affairs in the Pentagon and Secretary of Defense McNamara's utilization of CIA estimates and contract studies by external analytic organizations.⁶³ Yet this greater consciousness did not prevail until late in the war because it was not a consensus; Air Force and naval assessments of bombing effectiveness contradicted those of the critical civilian analysts. Nor has the elaboration and diversification of analytic resources for strategic estimates clearly reduced the potential for erroneous planning decisions. Determination of the salience and proper weight of conflicting indicators of strategic power and objectives or of the comparative significance of quantitative and

⁶⁰ Joseph C. Goulden, *Truth is the First Casualty* (Chicago: Rand McNally 1969), 101-4; Phil G. Goulding, *Confirm or Deny* (New York: Harper & Row 1970), 130-33, 269; *Pueblo and EC-121 Hearings* (fn. 27), 646-47, 665-73, 743-44, 780-82, 802-3, 865-67, 875, 880, 897-99; *Pueblo and EC-121 Report* (fn. 27), 1654-56, 1662-67; Armbrister (fn. 27), 196ff, 395; U.S., Congress, House, Committee on Armed Services, *Report, Review of Department of Defense Worldwide Communications: Phase I*, 92d Cong., 1st sess., 1971, and *Phase II*, 2d sess., 1972.

⁶¹ See, for example, James Blaker and Andrew Hamilton, *Assessing the NATO/Warsaw Pact Military Balance* (Washington, D.C.: Congressional Budget Office, December 1977).

⁶² SSCI, *Final Report* (fn. 7), I, 61; Thomas G. Belden, "Indications, Warning, and Crisis Operations," *International Studies Quarterly*, XXI (March 1977), 192-92.

⁶³ *Pentagon Papers*, IV, 111-12, 115-24, 217-32. CIA critiques of bombing results began even before the Tonkin Gulf crisis. CIA/OCI, Current Intelligence Memorandum, "Effectiveness of T-28 Strikes in Laos," June 26, 1964; CIA/DDI, Intelligence Memorandum, "Communist Reaction to Barrel Roll Missions," December 29, 1964. But ambivalence remained even within the CIA, which occasionally issued more sanguine evaluations—e.g., CIA Memorandum for National Security Council, "The Situation in Vietnam," June 28, 1965 (which McGeorge Bundy called directly to the President's attention), and CIA/OCI, Intelligence Memorandum, "Interdiction of Communist Infiltration Routes in Vietnam," June 24, 1965. (All memoranda are in LBJL/NSF-VNCF, Vol. I, item 5, Vol. III, items 28, 28a, 28b, Vol. VI A, items 4, 5, 8.) See also *Pentagon Papers*, IV, 71-74. See also the opposing assessments of the CIA, the civilian analysts in the Pentagon, and the Joint Chiefs in NSSM-1 (the Nixon Administration's initial review of Vietnam policy), reprinted in the *Congressional Record*, Vol. 118, part 13, 92d Cong., 2d sess., May 10, 1972, pp. 16749-836.

qualitative factors is inextricable from the political debate over foreign policy: uncertainties always remain, leaving the individual's visceral fears or hopes as the elements that tilt the balance of judgment.

Although marginal reforms may reduce the probability of error, the unresolvable paradoxes and barriers to analytic and decisional accuracy will make some incidence of failure inevitable. Concern with intelligence failure then coincides with concern about how policy can hedge against the consequences of analytic inadequacy. Covering every hypothetical vulnerability would lead to bankruptcy, and hedging against one threat may aggravate a different one. The problem is thus one of priorities, and hedging against uncertainty is hardly easier than resolving it. Any measures that clarify the cost-benefit trade-offs in policy hedges are measures that mitigate the danger of intelligence failure.

One reasonable rule in principle would be to survey the hypothetical outcomes excluded by strategic premises as improbable but not impossible, identify those that would be disastrous if they *were* to occur, and then pay the price to hedge against them. This is no more practicable, however, than the pure form of worst-case analysis, because it requires willingness to bear and inflict severe costs for dubious reasons. Escalation in Vietnam, after all, was a hedge against allowing China to be tempted to "devour" the rest of Southeast Asia. The interaction of analytic uncertainty and decisional prudence is a vicious circle that makes the segregation of empirical intelligence and normative policy an unattainable Platonic ideal.

In the simplest situation, the intelligence system can avert policy failure by presenting relevant and undisputed facts to non-expert principals who might otherwise make decisions in ignorance. But these simple situations are not those in which major intelligence failures occur. Failures occur when ambiguity aggravates ambivalence. In these more important situations—Acheson and Clausewitz to the contrary—the intelligence office may perform most usefully by *not* offering the *answers* sought by authorities, but by offering *questions*, acting as a Socratic agnostic, nagging decision makers into awareness of the full range of uncertainty, and making the authorities' calculations harder rather than easier. Sensitive leaders will reluctantly accept and appreciate this function. Most leaders will not; they will make mistakes, and will continue to bear the prime responsibility for "intelligence" failures. Two general values (which sound wistful in the context of the preceding fatalism) remain to guide the choice of marginal reforms: anything that facilitates dissent and access to authorities by intelligence producers, and anything that facilitates skepticism and scrutiny by consumers. The values are synergistically linked; one will not improve the use of intelligence without the other. (A third value, but one nearly impossible to achieve, would be anything that increases the time available to principals for reading and reflection.)

Intelligence failures are not only inevitable, they are natural. Some are even benign (if a success would not have changed policy). Scholars cannot legitimately view intelligence mistakes as bizarre, because they are no more common and no less excusable than academic errors. They are less forgivable only because they are more consequential. Error in scholarship is resolved dialectically, as deceptive data are exposed and regnant theories are challenged, refined, and replaced by new research. If decision makers had but world enough and time, they could rely on this process to solve their intelligence problems. But the press of events precludes the luxury of letting theories sort themselves out over a period of years, as in academia. My survey of the intractability of the inadequacy of intelligence, and its inseparability from mistakes in decision, suggests one final conclusion that is perhaps most outrageously fatalistic of all: tolerance for disaster.

The foregoing article is Unclassified.